

WELDER I

PURPOSE AND NATURE OF WORK

Purpose of work is to repair and fabricate ferrous and nonferrous parts and equipment. Position requires performing acetylene and arc welding, brazing, and cutting of ferrous and nonferrous metals. Assignments are also received in a variety of other maintenance duties and related shop and field work. Incumbents exercise independent judgment as to welding methods and work is subject to review by a superior for compliance with standard procedures and specifications while in progress or on completion. Occasionally, general supervision is exercised over the work helpers.

ILLUSTRATIVE EXAMPLES OF WORK (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

Preheats and cleans metals; lays out, cuts, and fits materials for welding; selects proper welding heat and proper type and size of electrodes for correct penetration and strength of welded metals. Repairs and fabricates special apparatus for general operational purposes. Maintains and makes minor repairs to welding equipment. Performs a variety of maintenance and repair tasks to structures and equipment.
Performs related work as required.

NECESSARY KNOWLEDGES, ABILITIES, AND SKILLS

Knowledge of the methods, materials, tools, and practices of the welder's trade and of general maintenance and repair work; particularly in the operational area to which assigned.
Knowledge of the properties of ferrous and non-ferrous metals encountered in welding work.
Knowledge of the occupational hazards and safety precautions of the trade.
Knowledge of shop arithmetic.
Ability to understand and follow oral and written instructions and to read and work from simple sketches, diagrams, blueprints, and broken parts.
Ability to establish and maintain effective relationships with superiors and other employees.
Skill in the use and care of the tools and equipment common to the welding trade and maintenance and repair work.

DESIRABLE TRAINING AND EXPERIENCE

Graduation from a standard high school; supplemented by courses in welding, experience as a welder and including some experience in performing varied maintenance and repair tasks; or any equivalent combination of training and experience.